RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET NO. 03-0289794 IN THE KURTEN (WOODBINE) FIELD, BRAZOS COUNTY, TEXAS

FINAL ORDER AMENDING FIELD RULES FOR THE KURTEN (WOODBINE) FIELD BRAZOS COUNTY, TEXAS

The Commission finds that after statutory notice in the above-numbered docket heard on July 31, 2014, the presiding examiners have made and filed a report and recommendation containing findings of fact and conclusions of law, for which service was not required; that the proposed application is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the examiners' report and recommendation, the findings of fact and conclusions of law contained therein, hereby adopts as its own the findings of fact and conclusions of law contained therein, and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the Field Rules adopted in Final Order No.03-69,594, effective April 11, 1977, for the Kurten (Woodbine) Field, Brazos County, Texas, are hereby amended. The amended Field Rules are set out in their entirety as follows:

RULE 1: The entire correlative interval from 8,133 feet to 8,788 feet as shown on the log of the Gulf Oil Corporation Jones Enhanced Recovery Unit, Well No. 1 (API No. 42-041-30075), formerly known as the Amalgamated Bonanza Petroleum Limited – I. Jones Unit No. 1, Well No. 1, H. Cartmell Survey, A-87, Brazos County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Kurten (Woodbine) Field.

RULE 2: No well for oil or gas shall hereafter be drilled nearer than THREE HUNDRED THIRTY (330) feet to any property line, lease line, or subdivision line. There is no minimum between well spacing limitation. The aforementioned distances in the above rule are minimum distances to allow an operator flexibility in locating a well, and the above spacing rule and the other rules to follow are for the purpose of permitting only one well to each drilling and proration unit. Provided however, that the Commission will grant exceptions to permit drilling within shorter distances and drilling more wells than herein prescribed whenever the Commission shall have determined that such exceptions are necessary either to prevent waste or to prevent the confiscation of property. When exception to these rules is desired, application therefore shall be filed and will be acted

upon in accordance with the provisions of Commission Statewide Rules 37 and 38, which applicable provisions of said rules are incorporated herein by reference.

In applying this rule, the general order of the Commission with relation to the subdivision of property shall be observed.

Provided, however, that for purposes of spacing for horizontal drainhole wells, the following shall apply:

- a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point.
- b. No horizontal drainhole well for oil or gas shall hereafter be drilled such that the first and last take points are nearer than ONE HUNDRED (100) feet to any property line, lease line or subdivision line.
- c. For each horizontal drainhole well, the distance perpendicular to such horizontal drainhole from any take point to any point on any property line, lease line or subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet.

For the purpose of assigning additional acreage to a horizontal drainhole well pursuant to Statewide Rule 86, the distance from the first take point to the last take point in the horizontal drainhole shall be used in such determination, in lieu of the distance from penetration point to terminus.

In addition to the penetration point and the terminus of the wellbore required to be identified on the drilling permit application (Form W-1H) and plat, the first and last take points must also be identified on the drilling permit application (Remarks Section) and plat. Operators shall file an as-drilled plat showing the path, penetration point, terminus and the first and last take points of all drainholes in horizontal wells, regardless of allocation formula.

If the applicant has represented in the drilling application that there will be one or more no perf zones or "NPZs" (portions of the wellbore within the field interval without take points), then the as-drilled plat filed after completion of the well shall be certified by a person with knowledge of the facts pertinent to the application that the plat is accurately drawn to scale and correctly reflects all pertinent and required data. In addition to the standard required data, the certified plat shall include the as-drilled track of the wellbore, the location of each take point on the wellbore, the boundaries of any wholly or partially unleased tracts within a Rule 37 distance of the wellbore, and notations of the shortest distance from each wholly or partially unleased tract within a Rule 37 distance of the

wellbore to the nearest take point on the wellbore.

A properly permitted horizontal drainhole will be considered to be in compliance with the spacing rules set forth herein if the as-drilled location falls within a rectangle established as follows:

- a. Two sides of the rectangle are parallel to the permitted drainhole and 33 feet on either side of the drainhole:
- b. The other two sides of the rectangle are perpendicular to the sides described in (a) above, with one of those sides passing through the first take point and the other side passing through the last take point.

Any take point of a horizontal drainhole outside of the described rectangle must conform to the permitted distance to the nearest property line, lease line or subdivision line.

For any well permitted in this field, the penetration point need not be located on the same lease, pooled unit or unitized tract on which the well is permitted and may be located on an Offsite Tract. When the penetration point is located on such Offsite Tract, the applicant for such a drilling permit must give 21 days notice by certified mail, return receipt requested to the mineral owners of the Offsite Tract. For the purposes of this rule, the mineral owners of the Offsite Tract are (1) the designated operator; (2) all lessees of record for the Offsite Tract where there is no designated operator; and (3) all owners of unleased mineral interests where there is no designated operator or lessee. In providing such notice, applicant must provide the mineral owners of the Offsite Tract with a plat clearly depicting the projected path of the entire wellbore. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant must publish notice of this application pursuant to the Commission's Rules of Practice and Procedure. If any mineral owner of the Offsite Tract objects to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights. Notice of Offsite Tract penetration is not required if (a) written waivers of objection are received from all mineral owners of the Offsite Tract; or, (b) the applicant is the only mineral owner of the Offsite Tract. To mitigate the potential for well collisions, applicant shall promptly provide copies of any directional surveys to the parties entitled to notice under this section, upon request.

RULE 3: The acreage assigned to the individual vertical oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be ONE HUNDRED SIXTY (160) acres. No proration unit shall consist of more than ONE HUNDRED SIXTY (160) acres except as hereinafter provided. There is no maximum diagonal limitation. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of oil. No double assignment of acreage will be accepted.

If after the drilling of the last well on any lease and the assignment of acreage to

each well thereon in accordance with the regulations of the Commission there remains an additional unassigned acreage of less than ONE HUNDRED SIXTY (160) acres, then and in such event the remaining unassigned acreage up to and including a total of FORTY (40) acres may be assigned as tolerance acreage to the last well drilled on such lease or may be distributed among any group of wells located thereon, so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

An operator, at his option, shall be permitted to form optional drilling and fractional proration units of FORTY (40) acres, with a proportional acreage allowable credit for a well on fractional proration units.

For the purpose of allocating allowable oil production, acreage may be assigned to each Horizontal Drainhole Well up to the acreage determined by the following formula:

$$A = (L \times 0.064) + 160$$
 acres, where

A = calculated area assignable, if available, to a horizontal drainhole well for proration purposes rounded upward to the next whole number evenly divisible by 40 acres; and

L = the Horizontal Displacement of the well measured in feet between the first and last take points within the designated interval, provided that L is at least 150 feet.

A single well may be developed with more than one horizontal drainhole from a single wellbore. A horizontal drainhole well developed with more than one horizontal drainhole shall be treated as a single well. The horizontal drainhole displacement (L) used for determining the proration unit assignable acreage (A) for a well with multiple horizontal drainholes shall be the longest horizontal drainhole plus the projection, on a line that extends in a 180 degree direction from the longest horizontal drainhole, or any other horizontal drainhole drilled in a direction greater than 90 degrees from the longest horizontal drainhole. A well developed with horizontal drainholes shall be regarded as having multiple orientations.

For the determination of acreage credit in this field, operators shall file for each oil or gas well in this field a Form P-15 <u>Statement of Productivity of Acreage Assigned to Proration Units</u>. On that form or an attachment thereto, the operator shall list the number of acres that are being assigned to each well on the lease or unit for proration purposes, in lieu of amended Form P-15's. For oil and gas wells, operators shall be required to file, along with the Form P-15, a plat of the lease, unit or property; provided that such plat shall not be required to show individual proration units. Operators may, however, file such proration unit plats for individual wells in the field if they so choose.

RULE 4: The maximum daily oil allowable for a vertical well in the field shall be determined by multiplying the applicable yardstick allowable for a well in the field by a fraction, the numerator of which is the acreage assigned to the well for proration purposes and the denominator of which is the maximum acreage authorized by these field rules for proration purposes, exclusive of tolerance acreage. The daily oil allowable for a well in the field shall be adjusted in accordance with Statewide Rule 49(a) when applicable.

The maximum daily oil allowable for a horizontal well in the field shall be determined by multiplying the acreage assigned to the well for proration purposes by 2.5125 barrels.

Done this 14th day of October, 2014.

RAILROAD COMMISSION OF TEXAS

(Order approved and signatures affixed by Hearings Divisions' Unprotested Master Order dated October 14, 2014)